

| Notice of Allowability | Application No. | Applicant(s) |
|-------------------------------|-------------------------|---------------------|
| | 09/459,108 | KNIGHT ET AL. |
| | Examiner Khanh Duong | Art Unit 2822 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to the amendment filed August 18, 2004.

2. The allowed claim(s) is/are 86,87,100 and 206-225.

3. The drawings filed on 22 November 2002 are accepted by the Examiner.

4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some* c) None of the:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) hereto or 2) to Paper No./Mail Date _____.

(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
- 4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
- 5. Notice of Informal Patent Application (PTO-152)
- 6. Interview Summary (PTO-413),
Paper No./Mail Date 11/10/04.
- 7. Examiner's Amendment/Comment
- 8. Examiner's Statement of Reasons for Allowance
- 9. Other _____.

DETAILED ACTION

Response to Amendment

This Office Action is in response to the amendment filed August 18, 2004.

Accordingly, claims 86, 87 and 100 were amended.

Currently, claims 86, 87, 100 and 206-225 are pending in the application.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David Salzman on November 10, 2004.

The application has been amended as follows:

In the Claims:

Re claim 100, line 10, after "second", delete "planar", and line 11, after "second", delete "planar".

Allowable Subject Matter

Claims 86, 87, 100 and 206-225 are allowed.

The following is an examiner's statement of reasons for allowance: none of the prior art of record, taken alone or in combination, fairly shows or suggests all the process limitations as claimed.

Re claim 86, none of the prior art of record discloses the steps of: locating a first subset of said electronic devices and a plurality of half-capacitors on a first semiconductor chip; locating a second subset of said electronic devices and a plurality of half-capacitors on a second semiconductor chip; and, aligning and affixing said first and second chips so as to capacitively couple said first and second chips using at least some of the half-capacitors on each of said chips.

Re claim 100, none of the prior art of record discloses the steps of: affixing said first chip to a substrate; aligning said second chip to said first chip; and, affixing said second chip to said substrate, thereby capacitively coupling corresponding half-capacitors on said first and second chips and providing direct capacitive coupling between said first and second chips.

Re claim 206, none of the prior art of record discloses the steps of: providing a plurality of first dice, said first dice each having half-capacitors formed on a surface thereof, providing a plurality of second dice, said second dice each having half-capacitors formed on a surface thereof, and arranging said dice overlaps at least three of said second dice, and each of said second dice overlaps at least three of said first first dice so that each of said first dice, thereby defining overlap areas, wherein at least some half-capacitors of said plurality of first dice are configured to be capacitively coupled to corresponding half-capacitors of said second dice in said overlap areas.

Re claim 214, none of the prior art of record discloses the steps of: providing a plurality of first dice, said first dice each having first half-capacitors formed on a surface thereof, providing a plurality of second dice, said second dice each having second half-capacitors formed on a surface thereof, and arranging said first dice so that each first die overlaps at least two of said second dice, thereby defining overlap areas, wherein said first half-capacitors located in said

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overlap areas are configured to be capacitively coupled to some of said second half-capacitors, wherein said first dice or said second dice have raised areas relative to said surfaces, the raised areas of each of said first or said second die contacting an area on one of the overlapping die.

Re claim 220, none of the prior art of record discloses the steps of: providing a plurality of first dice, said first dice each having half-capacitors formed on a surface thereof; providing a plurality of second dice, said second dice each having half-capacitors formed on a surface thereof; arranging said first dice so that each first die overlaps at least four of said second dice, thereby defining overlap areas; and aligning said first dice so that half-capacitors thereof located in said overlap areas are configured to be capacitively coupled to some half-capacitors of said second dice.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

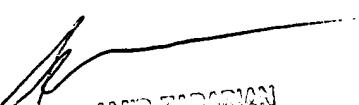
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Duong whose telephone number is (571) 272-1836. The examiner can normally be reached on Monday - Thursday (9:00 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on (571) 272-1852. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KBD


AMAL ZARDIAN
PATENT EXAMINER
EXAMINING CENTER 2822